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10/594,283	09/26/2006	Joaquin Espuelas Penalva	15508NP	6323

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EXAMINER	
CHOI, PETER Y	
ART UNIT	PAPER NUMBER
1794	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/594,283	PENALVA, JOAQUIN ESPUELAS	
	Examiner	Art Unit	
	Peter Y. Choi	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *28-30 and 52-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *28-30 and 52-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 September 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicants' substitute specification of June 18, 2008 is noted. It should be noted that under MPEP 608.01, there is no obligation on Examiner to make a detailed comparison between the old and the new specifications for determining whether or not new matter has been added. If, however, Examiner becomes aware that new matter is present, an objection thereto will be made.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 28-30 and 52-55 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

Regarding claims 28-30 and 52-55, claim 28 recites that the filter prevents the penetration of Legionella Pneumophila in airborne liquid droplets. Applicant's specification as originally filed, and as amended in Applicant's substitute specification of June 18, 2008, do not provide support for the claimed limitation. Therefore, the recited limitation constitutes new matter.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 28-30 and 52-55 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 28-30 and 52-55, claim 28 recites that the filter prevents the penetration of Legionella Pneumophila in airborne liquid droplets. The filter prevents the penetration of the droplets in what? As presently constituted, the claim appears to recite that the filter prevents Legionella Pneumophila from penetrating into airborne liquid droplets or that filter prevents airborne liquid droplets comprising Legionella Pneumophila. It is unclear what the scope of the claimed invention entails and how the claimed filter accomplishes such an intended use.

Regarding claim 29, the claim recites that the nonwoven fabric is formed from a mixture of two or more type fibers. It is unclear what fibers are type fibers and it is unclear what scope of the claim is intended, such as whether the "type fibers" are literally fibers or a type of fiber, but not literally a fiber.

Regarding claim 52, the claim recites that the filter is obtained by conventional filament fabric methods selected from the group consisting of various machines. It is unclear what method is claimed as the limitations recite machines or apparatus' and not methods of forming fabrics.

Regarding claim 53, the claim recites that the fibers are selected from a group consisting of artificial fibers, natural fibers and combinations of artificial and natural fibers. It is unclear whether Applicant is attempting to claim the fibers of claim 53 as a Markush group. Alternative

expressions such as a Markush group, recites members as being "selected from the group consisting of A, B and C." When materials recited in a claim are so related as to constitute a proper Markush group, they may be recited in the conventional manner, or alternatively. For example, if "wherein R is a material selected from the group consisting of A, B, C and D" is a proper limitation, then "wherein R is A, B, C or D" shall also be considered proper. Applicant recites that the fibers are selected from *a* group in contrast to fibers selected from *the* group. If Applicant intends to recite the group as a Markush group, corrections are required. Additionally, claim 53 recites that the fibers are selected from a group consisting of artificial fibers, natural fibers, and combinations of artificial and natural fibers. Claim 28, from which claim 53 depends, recites various fibers as a Markush group. However, claim 28 does not recite natural fibers or combinations of artificial fibers and natural fibers. It is unclear what is the scope of the fibers of claim 53 as the recitation of the fibers in claim 53 appears to broaden the scope of the claim from which it depends.

Regarding claim 54, the claim recites "a density in the range of thickness of 0.1 to 15 cm." It is unclear what is intended by a "density in the range of thicknesses." Is Applicant merely setting forth that the fiber has a density or is density determined in relation to a range of fiber thickness? Additionally, it is unclear whether the claim is setting forth that the nonwoven fabric is intended to be within the range of thicknesses claimed or whether the density is merely correlated to a range of thicknesses.

Claim Rejections - 35 USC § 102/103

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 28-30 and 52-55 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over US Pub. No. 2003/0170453 to Foss.

Regarding claims 28-30 and 52-55, Foss teaches a filter in any installation at risk from Legionella Pneumophila proliferation comprising a non-woven fabric formed from fibers cut or in monofilaments and their mixtures previously treated with anti-bacterial compounds, the fibers are selected from the group consisting of natural polymer chemical fibers which have or have not been modified, synthetic polymer chemical fibers, glass fibers, carbon fibers, other fibrous materials, bicomponents, and polycomponents (see entire document including paragraphs 0002-0013, 0089-0120, 0145, 0147, 0167-0180, 0211-0231, 0264-0278, 0287-0298, 0369, 0398, 0399).

Regarding claims 28-30 and 52, Foss does not appear to specifically teach that the filter is used for filtration and elimination of Legionella Pneumophila and wherein the filter prevents the penetration of Legionella Pneumophila in airborne liquid droplets. However, the limitations are

a recitation of the intended use of the filter. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. Since Foss teaches a substantially similar structure and composition (nonwoven fabric comprising the claimed fibers and an anti-bacterial compositions such as copper, zinc, tin and/or silver zeolite) as the claimed invention, the invention of Foss appears to be capable of performing the claimed intended use.

Regarding claims 28-30 and 52-55, Foss does not appear to specifically teach that the treated fibers exhibit anti-bacterial properties at temperatures above 200°C. Although the prior art does not disclose the claimed property, the claimed property is deemed to be inherent to the structure in the prior art since the Foss reference teaches an invention with a substantially similar structure and chemical composition (nonwoven fabric comprising the claimed fibers and an anti-bacterial compositions such as copper, zinc, tin and/or silver zeolite) as the claimed invention. Products of identical structure and composition cannot have mutually exclusive properties. The burden is on the Applicant to prove otherwise.

Regarding claim 29, the non-woven fabric is formed from a mixture of two or more type fibers and wherein the mixture of two or more fibers includes 0.5 to 99.5% of a first type fiber and the remainder of a second type fiber (paragraphs 0145, 0211-0231).

Regarding claim 30, the fibers have a fiber thickness in the range of 0.02 to 1,500 deniers, cross section selected from a group consisting of circular, square, elliptical, hollow, trilobal, flat and similar, and a length in the range of 0.1 mm to 500 mm or continuous filaments (paragraphs 0089-0120, 0145, 0211-0231).

Regarding claim 30, Foss does not appear to specifically teach a weight in the range of from 5 to 2,500 grams, a fusion point in the range of from 60° C to 450°C, and a range in color from translucent / white to black and any combinations thereof. Although the prior art does not disclose claimed properties, the claimed properties are deemed to be inherent to the structure in the prior art since the Foss reference teaches an invention with a substantially similar structure and chemical composition as the claimed invention. Products of identical structure and composition cannot have mutually exclusive properties. The burden is on the Applicant to prove otherwise. Additionally, since the fibers of Foss appear to be identical and/or substantially similar to the fibers disclosed in Applicant's specification pages 29-33, and the fibers of Foss comprise the claimed fiber thickness, cross section and length, it is reasonable to presume that those fibers additionally comprise the identical and/or substantially similar density in the range of thicknesses of 0.1 to 15 cm, weight, fusion point, and color absent evidence to the contrary. It should be noted that the fibers of Foss may additionally be dyed (*see for example* paragraph 0120) and that fibers inherently possess a color from white to black in the color spectrum.

Regarding claim 52, Foss appears to teach that the filter further comprises obtaining the filter by conventional filament fabric methods selected from the group consisting of Splitters, mixers, carding machines, cross lappers, felt machines, sewing machines, extruders, injectors, laminators, pre- needle punching machines, needle punchers, structurers, calendars, drying and thermofixing ovens, electrically resistant machines, direct or indirect gas flame machines, infra red thermofusion machines, embossers, welders, gluers, latex or resin and anti-bacterial component inductors, ultrafrequency machines, felting machines, fulling machines, powder application machines, fabric gluing machines, padding machines, and scrapers (paragraphs 0002-

0013, 0089-0120, 0145, 0147, 01530167-0180, 0211-0231, 0264-0278, 0287-0299, 0301, 0369, 0398, 0399). However, it should be noted that the filter of claim 28, from which claim 52 depends, claims a filter product and the limitation set forth in claim 52 appears to recite a product by process limitation. Absent a showing to the contrary, it is Examiner's position that the article of the applied prior art (nonwoven fabric comprising the claimed fibers and an anti-bacterial compositions such as copper, zinc, tin and/or silver zeolite) is identical to or only slightly different than the claimed article. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself.

Regarding claim 53, Foss teaches that the fibers are selected from a group consisting of artificial fibers, natural fibers and combinations of artificial and natural fibers (paragraphs 0145, 0211-0231).

Regarding claim 54, Foss does not appear to teach that the nonwoven fabric has a density in the range of thicknesses of 0.1 to 15 cm. Although the prior art does not disclose the claimed property, the claimed property is deemed to be inherent to the structure in the prior art since the Foss reference teaches an invention with a substantially similar structure and chemical composition (nonwoven fabric comprising the claimed fibers and an anti-bacterial compositions such as copper, zinc, tin and/or silver zeolite) as the claimed invention. Products of identical structure and composition cannot have mutually exclusive properties. The burden is on the Applicant to prove otherwise. Additionally, it should be noted that the nonwoven fabric necessarily has a density in a range of thicknesses.

Regarding claim 55, the anti-bacterial compounds are integrated into the body and core of the fibers (paragraphs 0089-0120).

In the event it is shown that Foss does not disclose the claimed invention with sufficient specificity, the invention is obvious because Foss discloses the claimed constituents and discloses that they may be used in combination.

Claim Rejections - 35 USC § 103

8. Claim 28-30 and 52-55 are rejected under 35 U.S.C. 103(a) as obvious over Foss in view of US Pub. No. 2003/0031687 to Falder.

Regarding claims 28-30 and 52-55, in the event it is shown that Foss does not teach an anti-bacterial compound with sufficient specificity, Falder teaches that it was known in the anti-bacterial filter art to form a filter comprising an anti-bacterial such as zinc and methylisothiazolone (Falder, paragraphs 0001, 0030-0032, 0045-0087, 0090-0101, 0250-0285, Tables 13-15). Additionally, Falder teaches that known anti-bacterial agents included silver, copper and tin, including tributyl tin (Falder, paragraphs 0022-0026). Therefore, it would have been obvious to one of ordinary skill in the anti-bacterial filter art at the time the invention was made to make the anti-bacterial filter of Foss, with the anti-bacterial agents, as taught by Falder, motivated by the expectation of forming a conventional filter with anti-bacterial agents known in the art to be predictably suitable and functionally equivalent in the anti-bacterial filter art.

Regarding claims 28-30 and 52-55, the prior art does not appear to specifically teach that the treated fibers exhibit anti-bacterial properties at temperatures above 200°C. Although the prior art does not disclose the claimed property, the claimed property is deemed to be inherent to the structure in the prior art since the prior art teaches an invention with a substantially similar structure and chemical composition (nonwoven fabric comprising the claimed fibers and an anti-bacterial compositions such as copper, zinc, tin, silver zeolite and/or methylisothiazolone) as the

claimed invention. Products of identical structure and composition cannot have mutually exclusive properties. The burden is on the Applicant to prove otherwise.

Response to Arguments

9. Applicant's arguments filed June 18, 2008, have been fully considered but they are not persuasive. Applicant argues that Foss teaches away from the effectiveness of the product at temperatures exceeding 200°C. Examiner respectfully disagrees. Foss and Foss in view of Falder teach substantially similar structures and compositions (nonwoven fabric comprising the claimed fibers and an anti-bacterial compositions such as copper, zinc, tin, silver zeolite and/or methylisothiazolone) as the claimed invention. Additionally, Applicant's specification teaches that silver and silver based derivatives, zeolites, and methylisothiazolone are suitable for the claimed invention (*see generally* Applicant's substitute specification, pages 26-38). Therefore, absent evidence to the contrary, the claimed property appears to be inherent to the claimed invention.

Although Applicant argues that Foss mentions higher loading of antimicrobial agents at temperatures of 80°C, Foss does not teach that the invention of Foss necessarily does not exhibit any anti-bacterial properties at temperatures of 200°C, as Applicant suggests. At best, Foss teaches that the invention of Foss may be washed more than 50 times at 80°C, and that commercial washings and/or dry cleanings may be conducted at 80°C. Therefore, Foss does not appear to teach away from the claimed invention. Additionally, it is well-settled that unsupported arguments are not a substitute for objective evidence. Applicant has not shown that the invention of Foss is incapable of exhibiting any anti-bacterial properties at temperatures exceeding 200°C.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Y. Choi whose telephone number is (571)272-6730. The examiner can normally be reached on Monday - Friday, 08:00 - 15:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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